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BAY AREA CLEAN WATER AGENCIES



BEFORE THE
CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Bay Area Clean Water
Agencies' Petition for Review of Action and
Failure to Act by the California Regional Water
Quality Control Board, San Francisco Bay
Region, in Adopting Order No. R2-2009-0018,
NPDES Permit No. CA0038547 and Waste
Discharge Requirements for the Delta Diablo
Sanitation District Wastewater Treatment Plant
and its associated collection system.

PETITION FOR REVIEW;
PRELIMINARY POINTS AND
AUTHORITIES IN SUPPORT OF
PETITION (WATER CODE
SECTIONS 13320 AND 13321)

Petitioner Bay Area Clean Water Agencies ("BACWA"), in accordance with section 13320 of the Water Code, hereby petitions the State Water Resources Control Board ("SWRCB" or "State Board") to review Order No. R2-2009-0018 of the California Regional Water Quality Control Board, San Francisco Bay Region, ("RWQCB" or "Regional Board") reissuing National Pollution Discharge Elimination System ("NPDES") Permit No. CA0038547 and Waste Discharge Requirements for the Delta Diablo Sanitation District Wastewater Treatment Plant and its associated collection system ("Delta Diablo"). A copy of Order No. R2-2009-0018, adopted on March 11, 2009, is attached to this Petition as **Exhibit A**. The issues and a summary of the bases for the Petition follow. At such time as the full administrative record is available and any other

1 material has been submitted, BACWA reserves the right to file a more detailed memorandum in
2 support of the Petition and/or in reply to the Regional Board's response.¹

3 BACWA is a joint powers authority ("JPA") whose members own and operate publicly-
4 owned treatment works ("POTWs") that discharge treated effluent to San Francisco Bay and its
5 tributaries. Collectively, BACWA's members serve nearly 7 million people in the nine-county
6 Bay Area, treating all domestic, commercial and a significant amount of industrial wastewater.
7 BACWA was formed to develop a region-wide understanding of the watershed protection and
8 enhancement needs through reliance on sound technical, scientific, environmental and economic
9 information and to ensure that this understanding leads to long-term stewardship of the San
10 Francisco Bay Estuary. BACWA member agencies are public agencies, governed by elected
11 officials and managed by professionals, who are dedicated to protecting our water environment
12 and the public health.

13 On February 10, 2009, BACWA submitted written comments on the tentative versions of
14 NPDES Permit No. CA0038547 ("Permit"). For the reasons contained herein, BACWA asserts
15 that provisions contained in the recently issued Permit for Delta Diablo are improper and
16 inappropriate. BACWA believes the issues being raised that are vitally important to Bay Area
17 POTWs.

18
19 **1. NAME, ADDRESS, TELEPHONE, AND EMAIL FOR PETITIONER:**

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26 In addition, all materials in connection with this Petition for Review should also be provided
27 to BACWA's special counsel at the following address:
28 _____

¹ The State Board's regulations require submission of a statement of points and authorities in support of a petition (23 C.C.R. §2050(a)(7)), and this document is intended to serve as a preliminary memorandum. However, it is impossible

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2. THE SPECIFIC ACTION OF THE REGIONAL BOARD WHICH THE STATE BOARD IS REQUESTED TO REVIEW:

BACWA seeks review of Order No. R2-2009-0018, reissuing NPDES Permit No. CA0038547 for Delta Diablo. The specific requirements of the Permit that BACWA requests the State Board to review relate to the following:

- A. Numeric-based effluent limits for dioxin-TEQ;
- B. Daily maximum effluent limitations; and
- C. Compliance schedule action plans for dioxin-TEQ.

The State Board is also requested to review the Regional Board's actions in adopting the Permit for compliance with due process and the California Administrative Procedures Act (Cal. Gov't Code §§11340, *et seq.*); the California Environmental Quality Act ("CEQA," Cal. Pub. Res. Code §21000, *et seq.*);² the Porter-Cologne Water Quality Control Act (Cal. Water Code §§13000, *et seq.*); the Clean Water Act ("CWA") (33 U.S.C. §§1251, *et seq.*) and its implementing regulations (40 C.F.R. Parts 122, 123, 130 and 131); the Water Quality Control Plan, San Francisco Bay Region (the "Basin Plan"); and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California ("SIP").

3. THE DATE ON WHICH THE REGIONAL BOARD ACTED:

The Regional Board adopted the Permit on March 11, 2009.

to prepare a thorough statement or a memorandum that is entirely useful to the reviewer in the absence of the complete administrative record, which is not yet available.

² Although the Permit at II.E. discusses an exemption from CEQA under Water Code §13389, that exemption is narrow, and only exempts Chapter 3. The remaining non-exempted parts of CEQA require all Regional Boards to consider the environmental consequences of their permitting actions, and to explore feasible alternatives and mitigation measures prior to the adoption of waste discharge requirements. *See e.g.*, Cal. Pub. Res. Code §21002; 23 C.C.R. §3733 (which states that the exemption in §13389 "does not apply to the policy provisions of Chapter 1 of CEQA").

1 **4. A STATEMENT OF THE REASONS THE ACTION WAS INAPPROPRIATE OR**
2 **IMPROPER:**

3 **A. The Regional Board Improperly Imposed Numeric Effluent Limitations for**
4 **Dioxin-TEQ.**

5 BACWA has been concerned about the imposition of numeric effluent limitations for dioxin
6 since the California Toxics Rule (“CTR”) was promulgated, notwithstanding that regulations’
7 promise that the “rule would not impose undue or inappropriate burden on the State of California or
8 its dischargers.” 65 Fed. Reg. 31687 (May 18, 2000). BACWA was initially hopeful that the
9 United States Environmental Protection Agency’s (“USEPA”) prediction that costs to meet the CTR
10 criteria would be “unlikely to reach the high-end of the [cost] range because State authorities are
11 likely to choose implementation options that provide some degree of flexibility or relief to the point
12 source dischargers” was accurate; unfortunately, in practice, this has not been the case. *Id.* at
13 31706. The purpose of this petition is to request that the State use its presumed flexibility when
14 issuing discharge permits where compliance with water quality criteria (whether these criteria are
15 CTR criteria or narrative objectives) has been demonstrated to be infeasible.

16 The Permit BACWA is appealing contains final and interim concentration limits for dioxin-
17 TEQ. *See* Permit at pgs. 12, 13. Similar limits were challenged by BACWA in previous
18 administrative and court appeals. Unfortunately, the Regional Board is not upholding some of the
19 holdings of those previous appeals. BACWA tried for several years to settle the outstanding
20 petitions on Bay Area POTW permits filed since 2000 by BACWA and others, but disagreement as
21 to legal requirements prevented consummation of a global settlement. Because these issues remain
22 as important today as they did nine years ago, or perhaps more important since the time for final
23 compliance with CTR criteria becomes shorter every day, BACWA continues to press for a final
24 ruling to re-incorporate the “flexibility or relief” promised over the years.

25 BACWA believes that the Regional Board included final numeric water quality-based
26 effluent limitations (“WQBELs”) for dioxin-TEQ in the Permit that are contrary to the requirements
27 of the CWA and state law.³ In most cases, these numeric limitations have been demonstrated to be

28 ³ The Regional Board must ensure its actions to implement the CWA are consistent with any applicable provisions of
the CWA and its implementing regulations. Cal. Water Code §13372.

1 infeasible to meet,⁴ and could result in the permitted entities having to construct expensive new
2 treatment facilities before August 1, 2014 in order to meet the final effluent limits, if the technology
3 even exists to provide such treatment. These treatment technologies far exceed the mandated
4 treatment requirements of the CWA and will likely become unnecessary once new water quality
5 objectives, site specific objectives, or TMDLs for this substance is in place and finally approved.⁵
6 Such a waste of resources is neither reasonable nor required (*see* Water Code §13000), and ignores
7 the fact that control of dioxin-TEQ may instead require a “carefully conceived, agency-approved,
8 long-term pollution control procedure for a complex environmental setting.” *Communities for a*
9 *Better Environment v. SWRCB*, 109 Cal.App.4th 1089, 1107 (2003). For these reasons, BACWA
10 challenges these limits herein as being contrary to federal and state law requirements.

11 1) Numeric Effluent Limitations are Not Required.

12 The Regional Board has imposed numeric WQBELs for various constituents in the Permit
13 based on 40 C.F.R. §122.44(d). *See* Permit at pgs.12, 13. However, as explained below, section
14 122.44(d) does not require the imposition of *numeric* WQBELs.

15 EPA regulations require that “each NPDES permit shall include the following requirements
16 when applicable.” *See* 40 C.F.R. § 122.44 (emphasis added). Subsection (d) of this section
17 imposes “any requirements in addition to or more stringent than promulgated effluent limitations
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20 ⁴ As defined by SWRCB Policy, “infeasible” means “not capable of being accomplished in a successful manner within
21 a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.” *See*
22 SIP at Appendix 1-3.

23 ⁵ Courts have recognized a step-wise process in pollutant control. In *San Francisco BayKeeper v. Whitman*, 287 F.3d
24 764,766-767 (April 15, 2002), the Ninth Circuit Court of Appeals determined that:

25 “[w]hen the NPDES system fails to adequately clean up certain rivers, streams or smaller water segments, the Act
26 requires the use of a water-quality based approach. States are required to identify such waters, which are to be
27 designated as ‘water quality limited segments’ (‘WQLSs’). The states must then rank these waters in order of
28 priority, and based on that ranking, institute more stringent pollution limits called ‘total maximum daily loads’ or
‘TMDLs.’ 33 U.S.C. §§1313(d)(1)(A), (C). TMDLs are the maximum quantity of a pollutant the water body can
receive on a daily basis without violating the water quality standard. The TMDL calculations are to ensure that the
cumulative impacts of multiple point source discharges are accounted for, and are evaluated in conjunction with
pollution from non-point sources. States must then institute whatever additional cleanup actions are necessary,
which can include further controls on both point and nonpoint pollution sources.” (emphasis added).

Thus, the Court reasoned that the TMDL program is the tool for correcting water quality impairments when they are
deemed to exist, not continued ratcheting down under the NPDES permitting program. Any other determination would
render the TMDL program superfluous.

1 guidelines or standards under sections 301, 304, 306, 307, 318 and 405 of the CWA necessary to
2 achieve water quality standards established under Section 303 of the CWA, including State
3 narrative criteria for water quality . . .” 40 C.F.R. § 122.44(d) (emphasis added). The regulations
4 require the imposition of “requirements,” not numeric effluent limitations. Furthermore, when
5 numeric effluent limitations are infeasible, EPA regulations specifically authorize the use of Best
6 Management Practices (“BMPs”) and other non-numeric or narrative requirements in lieu of
7 numeric limits. 40 C.F.R. §122.44(k)(3); *see also* SWRCB Order No. WQ 2003-12 at pg. 9.
8 Alternatively, the Regional Board could have styled this Permit after recent permits in the Central
9 Valley Region, which have imposed final numeric limits, but stated that these limits do not apply if
10 the discharger undertakes certain actions. *See* Order Nos. R5-2007-0036 and R5-2007-0039. This
11 approach, which USEPA did not veto, takes a creative approach to dealing with infeasible final
12 limits without the necessity of compliance schedules.

13 The California Court of Appeal in the *Tesoro* case specifically ruled on this issue and stated
14 that numeric limits are not required, and that, where infeasibility is demonstrated, numeric limits
15 can be replaced with non-numeric requirements. *See Communities for a Better Environment v.*
16 *SWRCB*, 109 Cal.App.4th at 1103-1105; *see accord In the Matter of the Petition of Citizens for a*
17 *Better Environment, Save San Francisco Bay Association, and Santa Clara Audubon Society,*
18 *SWRCB Order No. WQ 91-03 (May 16, 1991).* This appellate decision is binding on the State
19 Board as a party to that case and must be followed in the case of this Permit.

20 By including final numeric effluent limitations in lieu of non-numeric or narrative
21 requirements where numeric limits have been demonstrated to be infeasible, the Regional Board
22 exceeded federal law requirements. If the Regional Board chooses to exceed federal law
23 requirements, then it must comply with state law requirements. *City of Burbank, et al v. SWRCB, et*
24 *al.*, 35 Cal. 4th 613, 627-628 (2005). However, the Regional Board failed to comply with the
25 requirements of Water Code §13263(a), which requires consideration of several factors including
26 those contained in Water Code §13241 when adopting numeric effluent limitations more stringent
27 than required by federal law into this Permit.

28 ///

1 Thus, the State Board should remand the Permit to the Regional Board and direct the
2 Regional Board to comply with the provisions of 40 C.F.R. §122.44(k)(3), by removing the numeric
3 concentration-based effluent limits for dioxin-TEQ where compliance with such limits has been
4 demonstrated to be infeasible, and replace these numeric limits with narrative requirements (source
5 control, best management practices, etc.) in lieu of the numeric limits.⁶

6 2) Dioxin-TEQ Limits

7 The Permit contains the following final effluent limitations for dioxin-TEQ:

8 <u>AMEL (µg/L)</u>	<u>MDEL (µg/L)</u>	<u>Effective Date</u>
9 1.4 x 10 ⁻⁸	3.9 x 10 ⁻⁸	8/01/2014

10 The CTR did not promulgate numeric water quality criteria for dioxin-TEQ, only for
11 2,3,7,8-tetrachlorodibenzo-p-dioxin (“2,3,7,8-TCDD”). In addition, no aquatic life criteria were
12 promulgated in the CTR or the Basin Plan for dioxin-TEQ. Only a human-health criteria for
13 municipal (“Water & Organisms”), and non-municipal drinking water supply waters (*e.g.*,
14 “Organisms Only”) were set at 0.000000013 and 0.000000014 µg/L, respectively, based on a
15 carcinogenicity risk of 1x10⁻⁶. 40 C.F.R. §131.38(b)(1)(#16). These figures are based on an
16 assumed exposure pathway of consumption of 6.5 grams per day of organisms from the Bay that
17 are contaminated at a level equal to the criteria concentration, but multiplied by a
18 “bioconcentration factor.” 65 Fed. Reg. 31693 (May 18, 2000). This amount can be consumed
19 over a lifetime (70 years) without expecting an adverse effect. *Id.* However, current detection
20 technologies cannot measure to these levels.

21 Neither the Permit nor the accompanying Fact Sheet demonstrated reasonable potential for
22 2,3,7,8-TCDD. *See* Permit at pg. F-18. However, the same table containing the reasonable
23 potential analysis (“RPA”) shows reasonable potential (“RP”) for dioxin-TEQ, even though no
24 adopted water quality criteria or objective exists for dioxin-TEQ upon which a RPA could be

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28 ⁶ Such an action would negate the need for compliance schedules as well since Delta Diablo would presumably be able
to immediately comply with narrative requirements for the constituents at issue.

1 performed.⁷ The Regional Board's action in finding reasonable potential in the absence of
2 applicable numeric water quality criteria was unreasonable, in violation of Water Code §13000,
3 and 40 C.F.R. §122.44(d).

4 The number used in the RPA for dioxin-TEQ was exactly the same as the promulgated
5 criterion for 2,3,7,8-TCDD. The Permit provides:

6 To determine if the discharge of dioxin or dioxin-like compounds from the Delta Diablo
7 Sanitation District facility has reasonable potential to cause or contribute to a violation of
8 the Basin Plan's narrative bioaccumulation WQO, Regional Water Board staff used TEFs
9 [Toxic Equivalent Factors] to express the measured concentrations of 16 dioxin congeners
10 in effluent and background samples as 2,3,7,8-TCDD. These "equivalent" concentrations
11 were then compared to the CTR numeric criterion for 2,3,7,8-TCDD (1.3×10^{-8} µg/L).
12 Although the 1998 WHO scheme includes TEFs for dioxin-like PCBs, they are not
13 included in this Order's version of the TEF procedure because the CTR has established a
14 specific water quality standard for dioxin-like PCBs and they are included in the analysis
15 of total PCBs.

16 See Permit at pg. F-25-26. Given that 11 years have passed since the TEFs were first adopted by
17 the World Health Organization, it is unreasonable for the Regional Board to continue to use a
18 broad narrative objective and not adopt numeric objectives and an implementation plan through a
19 formal rulemaking process as required by Water Code §13241 and §13242, and the triennial
20 review process required by CWA section 303, 33 U.S.C. §1313(c) and (e). The use of a narrative
21 objective to indefinitely skirt state law requirements also ignores the congressional mandate that
22 water quality standards criteria "shall be specific numeric criteria for such toxic pollutants." 33
23 U.S.C. §1313(c)(2)(B) (emphasis added).

24 Moreover, the Permit mixes criteria in order to create a finding of RP. The Permit states
25 that "because the MEC (1.3×10^{-7} µg/L) exceeds the applicable water quality criterion ($1.3 \times$
26 10^{-8} µg/L)" and that the "average background concentration of dioxin-TEQ at the Sacramento
27 River RMP station (3.4×10^{-8} µg/L) also exceeds the applicable water quality criterion," this
28 somehow demonstrates RP. See Permit at pg. F-26 para. 4.b. The Regional Board should not be
allowed to mix and match 2,3,7,8-TCDD and dioxin-TEQ in order to find RP; they must use each

⁷ It should be noted that this is contrary to the RPA for other constituents where the Permit states "No Criteria" in the table instead of inserting a non-promulgated criteria. See Permit at pg. F-17-20.

1 independently, taking into account the different TEF values for each cogener, in order to properly
2 determine RP. The Regional Board did not do this, and these limits should be overturned.

3 a) The Regional Board Improperly Utilized the Basin
4 Plan's Narrative Objective for Bioaccumulation to
5 Justify the Imposition of a Dioxin-TEQ Limit.

6 In adopting a numeric effluent limitation for dioxin-TEQ, the Regional Board attempted to
7 justify its actions by claiming that the applicable water quality objectives specified in the Basin Plan
8 require limits to protect against unsafe levels of dioxin in the fatty tissue of fish and other
9 organisms. *See* Permit at pg. F-25. The Basin Plan contains no numeric objectives specifically set
10 to define acceptable levels of these constituents in fish tissue or sediment, and the CTR only set
11 numeric criteria for 2,3,7,8-TCDD, not for all the congeners of dioxins. Thus, the Regional Board
12 improperly relied upon the Basin Plan's narrative objective for Bioaccumulation to justify limits for
13 dioxin-TEQ.

14 In addition, the Regional Board improperly lumped together all of the congeners of dioxin
15 and furans. Had the RPA been done on each individual congener, most if not all would not show
16 reasonable potential because of the varying TEF for each. *See* Permit at pg. F-25-26. However,
17 pooling all of the congeners together creates an unnecessary finding of reasonable potential for all
18 congeners. The Regional Board's inclusion of an effluent limit for dioxin-TEQ based on all of the
19 congeners of dioxins and furans improperly ignores that the congeners do not create reasonable
20 potential. Imposition of limits on congeners without reasonable potential violates the specific
21 mandates of the Basin Plan and federal regulations.⁸

22 A review of the Bioaccumulation objective demonstrates that this objective does not provide
23 authorization for the numeric limits imposed in this instance. The Bioaccumulation objective found
24 on page 3-2 of the Basin Plan provides:

25 Many pollutants can accumulate on particles, in sediment, or
26 bioaccumulate in fish or other aquatic organisms. Controllable water
27 quality factors shall not cause a detrimental increase in concentrations
28 of toxic substances found in bottom sediments or aquatic life. Effects

⁸ The insertion of limits without reasonable potential is contrary to permit findings that state "WQBELs are not included in this Order for constituents that do not demonstrate reasonable potential;" *See* Permit at pg. F-20, para. C.3.e(2).

1 on aquatic organisms, wildlife, and human health will be considered.
2 (emphasis added)

3 Courts have acknowledged that the presence of dioxin may be beyond the Discharger's
4 control. *See, e.g., Communities for a Better Environment*, 109 Cal.App.4th at 1096 ("Dioxins are
5 not produced intentionally. They are formed as undesired byproducts of combustion and the
6 manufacture and use of certain chlorinated chemical compounds. They exist in the environment
7 worldwide, particularly in air, water, soils, and sediments. They enter the atmosphere through aerial
8 emissions and widely disperse through a number of processes, including erosion, runoff, and
9 volatilization from land or water. For example, automobile exhaust is a common source of
10 dioxins.") Therefore, the minimal contribution of dioxin-TEQ by Delta Diablo's POTW is not a
11 "controllable water quality factor" that is causing a "detrimental increase in concentrations of toxic
12 substances found in bottom sediments or aquatic life," and imposing a limit for dioxin-TEQ is
13 neither necessary nor based upon the findings and evidence. Therefore, control of all of these
14 sources is not within the jurisdiction of Delta Diablo.

15 Additionally, a numeric effluent limitation can only be imposed through a narrative water
16 quality objective if the narrative objective contains an appropriate mechanism to "translate" the
17 narrative requirement (*i.e.*, to translate a narrative objective into a concentration or mass effluent
18 limitation).⁹ In order for a numeric limit derived from a narrative objective to be appropriate, the
19 derivation of the numeric limit must be transparent. A clear explanation of the translation from the
20 narrative water quality objective must be set forth in the NPDES permit.¹⁰ *See* 40 C.F.R.

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22 ⁹ Federal regulations mandate that "[w]here a State adopts narrative criteria for toxic pollutants to protect designated
23 uses, the State must provide information identifying the method by which the State intends to regulate point source
24 dischargers of toxic pollutants on water quality limited segments based on such narrative criteria. Such information
25 may be included as part of the standards" 40 C.F.R. §131.11(a)(2). Since the Basin Plan's narrative objective for
26 Bioaccumulation does not contain an appropriate translation mechanism, the only conclusion can be that subjective,
arbitrary, or wholly inapplicable WQBELs for dioxin-TEQ have been imposed in the Permit. The rationale in the
27 *EBMUD* Order, SWRCB Order No. WQ 2002-0012 at pgs. 6-7 does not apply in this case, since the dioxin-TEQ limits
28 are final WQBELs and were not adopted in conformance with federal regulations as there are no 304(a) guidance
criteria for dioxin-TEQ. *See* <http://www.epa.gov/waterscience/criteria/wqcriteria.html>.

¹⁰ In EPA's official guidance documents, EPA explains at length the process the State must go through to implement an
adequate translator mechanism. *See* EPA Water Quality Standards Handbook at 3-13 to 3-26 (1994). Among other
things, EPA provides that a State's translator procedure for narrative criteria should specifically describe:

- specific, scientifically defensible methods by which the state will implement its narrative toxicity standard for all priority pollutants;

1 §124.8(b)(4); *Topanga Ass'n for a Scenic Community v. County of Los Angeles*, 11 Cal. 3d 506, 515
2 (1974); *California Edison v. SWRCB*, 116 Cal. App. 3d 751, 761 (1981); *see also In re Petition of*
3 *the Pinole-Hercules Water Pollution Control Plant and County of San Francisco*, State Board
4 Order No. WQ-95-4 at 10 (Sept. 21, 1995). The failure by the Regional Board to clearly enunciate
5 the translation from a narrative objective to a numeric limit in the Findings or Fact Sheet of the
6 Permit was an abuse of discretion.

7 Moreover, the Permit fails to show that dioxin-TEQ levels in the discharge have caused a
8 detrimental impact in concentrations of toxic substances found in bottom sediments or aquatic life.
9 Without such a showing, no limits may be imposed under the narrative bioaccumulation objective.

10 b) Meeting the Dioxin Concentration Limit is Not Feasible

11 As stated above, dioxins enter the environment from a variety of sources, primarily
12 combustion sources. *See Communities for a Better Environment*, 109 Cal. App. 4th at 1096
13 (“automobile exhaust is a common source of dioxins.”) Further, the Regional Board has concurred
14 with Delta Diablo that compliance with the dioxin-TEQ limits is infeasible. *See Permit* at pg. F-26.
15 For these reasons, numeric effluent limitations were not required and represent an abuse of
16 discretion.¹¹

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- 21 ■ how these methods will be integrated into the State’s priority pollutant control program;
 - 22 ■ methods the State will use to identify those pollutants to be regulated in a specific discharge;
 - 23 ■ an incremental cancer risk for carcinogens;
 - 24 ■ methods for identifying compliance thresholds in permits where calculated limits are below detection;
 - 25 ■ methods for selecting appropriate hardness, pH, and temperature variables for criteria expressed as functions;
 - 26 ■ methods or policies controlling the size and in-zone quality of mixing zones;
 - 27 ■ design flows to be used in translating chemical-specific numeric criteria for aquatic life and human health into
 - 28 permit limits; and
 - other methods and information needed to apply standards on a case-by-case basis.

25 *Id.* at 3-25; *see also* EPA, TSD for Water Quality-Based Toxics Control at 30-31(1991).

26 ¹¹ The Regional Board should have done what it did in the Vallejo permit, Order No. R2-2006-0056, which was to
27 state: “Due to the limited monitoring data, no dioxin limits (final or interim) are established. The final limits for dioxin
28 TEQ will be based on the WLA assigned to the Discharger in the TMDL. This Order requires additional dioxin
monitoring to complement the Clean Estuary Partnership’s special dioxin project, consisting of impairment, assessment,
and a conceptual model for dioxin loading into the Bay. The permit will be reopened, as appropriate, to include interim
dioxin limitations when additional data become available.” Order No. R2-2006-0056 at pg. F-24.

1 **B. The Regional Board Improperly Included Daily Maximum Effluent**
2 **Limitations.**

3 Where effluent limitations are authorized, federal regulations provide that for discharges
4 from POTWs, all permit effluent limits shall, unless impracticable, be stated as average weekly and
5 average monthly discharge limitations.¹² 40 C.F.R. § 122.45(d)(2). The Permit contains several
6 unsupported daily maximum limits, including, among others, the limit for dioxin-TEQ. *See* Permit
7 at pg. 12.

8 In order to justify the inclusion of these daily limits, the Regional Board first cited to the
9 language of 40 C.F.R. §122.45(d)(1), which states that: “For continuous discharges all permit
10 effluent limitations, standards, and prohibitions, including those necessary to achieve water quality
11 standards shall unless impracticable be stated as maximum daily and average monthly discharge
12 limitations for all discharges other than publicly owned treatment works.” *See* Permit at pg. F-13,
13 para. C.1.b.(1). This citation ignores that these discharges *are* from a publicly owned treatment
14 work, and the rule for such a facility is that “average weekly and average monthly discharge
15 limitations [apply] for POTWs.” 40 C.F.R. §122.45(d)(2). Therefore, this first justification for
16 daily limits fails.

17 The State Implementation Policy (SIP) did not change the federal requirements. In enacting
18 the SIP, the State Board may have attempted to modify the federal regulatory prohibition on the use
19 of daily maximum limits for POTWs by stating: “For this method only [referring to limits for
20 aquatic life protection] maximum daily effluent limitations shall be used for publicly-owned
21 treatment works (POTWs) in place of average weekly limitations.” SIP at 8, §1.4. However, prior
22 to authorizing the use of daily maximum limitations in POTW permits for compliance with aquatic
23 life criteria in the SIP, the State Board did not make the required demonstration that the imposition
24 of average weekly and average monthly effluent limitations for the protection of aquatic life was
25 “impracticable” per the requirements of 40 C.F.R. §122.45(d). Therefore, the State Board’s
26 authorization of daily maximum limitations for compliance with aquatic life criteria does not meet
27

28 ¹² Federal regulations also provide that discharges from all dischargers other than POTWs, effluent limitations shall be
stated as maximum daily and average monthly discharge limitations. 40 C.F.R. §122.45(d)(1).

1 federal requirements or California Water Code Chapter 5.5 requirements for consistency with
2 federal requirements. As such, the Regional Board should remove all daily maximum effluent
3 limitations based on aquatic life criteria.

4 Further, the State Board did not include in the SIP the same language purportedly allowing
5 for the inclusion of daily maximum limitations in POTW permits for effluent limitations based upon
6 technological requirements (for conventional pollutants) or upon human health criteria. Therefore,
7 even if the SIP provisions pertaining to maximum daily limits for aquatic life criteria were valid, 40
8 C.F.R. §122.45(d) requires the Regional Board to remove all daily maximum interim and final
9 effluent limitations based on human health criteria or technological requirements. The criteria for
10 2,3,7,8-TCDD is human health-based. *See* 40 CFR §131.38(b)(1)(16). Thus, daily maximum limits
11 are not necessary.

12 The Permit never specifies why monthly and weekly average limits are impracticable. The
13 Permit merely states that “MDELs are used in this Order to protect against acute water quality
14 effects. The MDELs are necessary for preventing fish kills or mortality to aquatic organisms.”
15 Permit at pg. F-13, para. C.1.c. These statements do not constitute an impracticability analysis, and
16 are inadequate to justify daily limits as there is no evidence to support such generic findings.

17 Furthermore, at most, these justifications would address only limits based on acute aquatic
18 life criteria. However, the Regional Board did not include limits based on acute aquatic life
19 protection, rather, the limits for dioxin-TEQ are based on long-term chronic human exposure. *See*
20 *In the Matter of the Own Motion Review of the City of Woodland*, SWRCB Order No. WQ 2004-
21 0010 (holding that “implementing the limits as instantaneous maximums appears to be incorrect
22 because the criteria guidance value . . . is intended to protect against chronic effects.”)

23 Therefore, the Regional Board’s inclusion of daily maximum effluent limitations in the
24 Permit, without a specific, pollutant-by-pollutant impracticability analysis, violated 40 C.F.R.
25 §122.45(d)(2) and Water Code Chapter 5.5. By violating federal and state law, the Regional Board
26 proceeded without, or in excess of, its jurisdiction and has committed a prejudicial abuse of
27 discretion by not proceeding in a manner required by law. For these reasons, the State Board should
28

1 direct the Regional Board to remove the daily maximum effluent limitations not properly analyzed
2 for impracticability. *See accord* SWRCB Order No. 2002-0012 at pg. 20-21 (July 18, 2002) (“the
3 Regional Board must include a finding in the permit on remand explaining the impracticability of
4 weekly average limits.”); SWRCB Order No. 2002-0015 at pg. 56; *City of Woodland v. Regional*
5 *Water Quality Control Board for the Central Valley Region, and SWRCB*, Case No. RG04-188200,
6 *Statement of Decision* at pg. 20.

7 **C. The Regional Board Improperly Imposed A Compliance Schedule**
8 **Action Plan for Dioxin-TEQ in the Permit which is Overly Stringent.**

9 BACWA is concerned that having stringent schedules contained in the Permit will
10 eventually require the construction of capital facilities when BACWA has repeatedly been told that
11 building additional treatment is not the expected direction of the Bay Area water quality program.
12 BACWA was under the impression that the direction was to pursue regulatory alternatives, such as
13 TMDLs, site specific objectives, and pollution prevention (as described in the implementation plan
14 for the mercury TMDL). The Permit veers way off this intended direction.

15 Also, this Permit contains a compliance schedule for dioxin-TEQ, which cannot be source
16 controlled, or for which wastewater treatment plant effluents have been identified as non-
17 significant sources. *See* Permit at pg. 24. Additionally, dioxin-TEQ is already being addressed
18 through an alternative regulatory strategy that will appropriately resolve beneficial use concerns
19 for the San Francisco Bay. The compliance schedule in the Permit is overly burdensome for
20 dioxin-TEQ, as specified below:

21 The dioxin congeners found in fish tissue samples, which formed the initial basis for the
22 dioxin 303(d) listing, are different than the congeners detected in publicly-owner treatment works.
23 Given that the sources of dioxin are uncontrollable by municipal wastewater treatment plants and
24 are primarily introduced through air deposition, the compliance requirements for dioxin reduction
25 in the effluent will have little, if any, environmental benefit to reduce the concentrations of dioxin
26 congeners found in fish tissue. Thus, a *de minimus* exception should be granted in this case at least
27 until the TMDL is finalized. *See Ober v. USEPA*, 243 F.3d 1190, 1195 (9th Cir. 2001) (“de
28 minimis exception is allowed for regulation yielding trivial gain.”).

1 For these reasons, the action plans in the Permit should be revised to remove all activities
2 related to installation of capital improvements. In addition, any pollution prevention activities
3 should be identical to resolutions or orders already adopted by the Regional Board for specific
4 constituents. No new or different activities should be required for dioxin-TEQ.

5 **5. THE MANNER IN WHICH THE PETITIONER IS AGGRIEVED:**

6 The Permit includes requirements, challenged herein, which are unreasonable, contrary to
7 legal requirements, and not supported by the findings and evidence in the administrative record.
8 The limits for dioxin-TEQ are unreasonable because Delta Diablo has extremely limited control
9 over influent sources. Further, these requirements could ultimately impose considerable costs on
10 the agency's ratepayers for potential mandatory and discretionary penalties imposed for non-
11 compliance with the challenged requirements, or for construction of additional treatment units to
12 meet limits imposed without a demonstration that such requirements would result in material
13 improvements in the water quality of the Bay. In fact, such expenditures could have a negative
14 impact on water quality, by diverting limited public funds away from other projects that might have
15 a higher potential for improvements in water quality.

16 BACWA is aggrieved by unreasonable permit prohibitions that may put Delta Diablo in
17 non-compliance with the Permit. BACWA's membership will be aggrieved by any permit
18 provisions that cannot now or in the future be met as federal and state law provide harsh sanctions
19 for non-compliance with effluent limitations in a wastewater discharge permit. For example,
20 California Water Code §13385 prescribes mandatory minimum penalties of \$3,000 per day per
21 violation, with narrow exceptions. With this statute, the State has no latitude to excuse
22 noncompliance with the Permit.

23 Other statutory provisions, while not setting mandatory minimum penalties, create even
24 greater exposure for BACWA's members. The CWA authorizes civil penalties of up to \$32,500 per
25 day per violation, 33 U.S.C. § 1319(d), and also authorizes criminal penalties, including the
26 incarceration of public officials, for knowing or negligent permit violations. 33 U.S.C §1319(c); *see*
27 *U.S. v. Weitzenhoff*, 35 F.3d 1275 (9th Cir. 1994) (managers of treatment plant convicted of permit
28

violations). In addition to enforcement by administrative agencies, private parties can seek civil penalties pursuant to the "citizen suit" provisions of the CWA. *See* 33 U.S.C. §1365.

Likewise, California's Porter-Cologne Water Quality Act contains stiff penalties for violation of effluent limitations in a wastewater discharge permit. *See* Cal. Water Code §§ 13385 and 13387. This act authorizes a penalty of up to \$25,000 per day per violation, with additional liability not to exceed \$25 per gallon if the discharge is to navigable waters of the United States and either is "not susceptible to cleanup or is not cleaned up." Cal. Water Code §13385(b)(1)-(2), (d). The act also establishes criminal liability for intentional or negligent violation of effluent limitations contained within a permit. Cal. Water Code §13387(a)-(d).

Furthermore, the application of illegal or unreasonable effluent limitations in violation of federal and state law causes substantial harm to BACWA and its members that have a vested interest in complying with the law. This appeal furthers one of BACWA's express purposes, which is "to represent the interests of the Agency or one or more Member Agencies, including, without limiting the generality of the foregoing, by participating in the appeal of or court challenge of the issuance or denial of issuance of NPDES permits or the adoption or amendment of water quality orders, regulations or decisions."

6. THE SPECIFIC ACTION BY THE STATE OR REGIONAL BOARD WHICH PETITIONER REQUESTS:

Petitioner seeks an Order by the State Board that will remand Order No. R2-2009-0018 to the Regional Board for revisions and will direct the Regional Board to:

- A. Remove the numeric effluent limits for dioxin-TEQ;
- B. Remove daily maximum effluent limitations where the Regional Board failed to conduct an impracticability analysis; and
- C. Revise the compliance schedule action plan for dioxin-TEQ to (1) remove all activities related to installation of capital improvements and (2) ensure that any pollution prevention activities are identical to resolutions or orders already adopted by the Regional Board.

1 **7. A STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF LEGAL**
2 **ISSUES RAISED IN THE PETITION:**

3 BACWA's preliminary statement of points and authorities is set forth in Section 4 above.
4 Nevertheless, BACWA reserves the right to supplement this statement upon receipt and review of
5 the administrative record.

6 In Section 4, BACWA asserts that provisions of the Permit are inconsistent with the law and
7 otherwise inappropriate for various reasons, including: failure to comply with the Porter-Cologne
8 Water Quality Control Act (Cal. Water Code, §§ 13000 *et seq.*); failure to comply with the CEQA
9 (Cal. Public Resources Code, §§ 21000 *et seq.*, and 23 C.C.R. § 3733); failure to comply with the
10 APA (Cal. Gov't Code, §§ 11340 *et seq.*); inconsistency with the Water Quality Control Plan, San
11 Francisco Bay Region (Basin Plan); inconsistency with the Clean Water Act (33 U.S.C. §§ 1251 *et*
12 *seq.*) and its implementing regulations (40 C.F.R. Parts 122, 123, 130, and 131); inconsistency with
13 EPA guidance (EPA's Water Quality Standards Handbook (1994, 3^d edition)); absence of findings
14 supporting the provisions of the Order; Regional Board findings that are not supported by the
15 evidence; and other grounds that may be or have been asserted by Petitioner.

16 **8. A STATEMENT THAT THE PETITION HAS BEEN SENT TO THE REGIONAL**
17 **BOARD AND TO THE DISCHARGER:**

18 A true and correct copy of this Petition was mailed by First Class mail on April 9, 2009, to
19 the Discharger, and to the Regional Board at the following address:

20 Bruce Wolfe, Executive Officer
21 California Regional Water Quality Control Board,
22 San Francisco Region
23 1515 Clay Street, Suite 1400
24 Oakland, California 94612

25 **9. A STATEMENT THAT THE SUBSTANTIVE ISSUES AND OBJECTIONS RAISED**
26 **IN THE PETITION WERE RAISED BEFORE THE REGIONAL BOARD, OR AN**
27 **EXPLANATION WHY NOT:**

28 The substantive issues and objections were raised before the Regional Board in this
29 permitting action through written comments.

30 ///

1 **10. PETITIONER'S REQUEST FOR ABEYANCE:**

2 Notwithstanding the vital importance of the issues contained herein, BACWA requests that
3 the State Board place BACWA's Petition for Review in abeyance pursuant to 23 C.C.R. §2050.5(d)
4 to allow time for BACWA to attempt to resolve its concerns with the Regional Board informally.

5 DATED: April 9, 2009

Respectfully submitted,

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Melissa A. Thorne
DOWNEY BRAND LLP
BACWA Special Counsel

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Linda S. Adams
Secretary for
Environmental Protection

California Regional Water Quality Control Board

San Francisco Bay Region

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Arnold Schwarzenegger
Governor

ORDER NO. R2-2009-0018

NPDES NO. CA0038547

The following Discharger is subject to waste discharge requirements set forth in this Order.

Table 1. Discharger Information

Discharger	Delta Diablo Sanitation District
Name of Facility	Delta Diablo Sanitation District Wastewater Treatment Plant and its associated collection system
Facility Address	2500 Pittsburg-Antioch Highway
	Antioch, CA 94509
	Contra Costa County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

The discharge by the Delta Diablo Sanitation District Wastewater Treatment Plant (Plant) from the discharge point identified below is subject to waste discharge requirements as set forth in this Order.

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Secondary Treated Municipal Wastewater	38° 01' 40" N	121° 50' 14" W	New York Slough

Table 3. Administrative Information

This Order was adopted by the Regional Water Board on:	March 11, 2009
This Order shall become effective on:	May 1, 2009
This Order shall expire on:	April 30, 2014
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date

I, Bruce H. Wolfe, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on March 11, 2009.

Digitally signed
by Bruce Wolfe
Date: 2009.03.16
16:49:04 -07'00'

Bruce H. Wolfe, Executive Officer

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Attachments

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Attachment F – Fact Sheet.....	F-1
Attachment G – The following documents are part of this Permit, but are not physically attached due to volume. They are available on the internet at www.waterboards.ca.gov/sanfranciscobay/ .	
- Self-Monitoring Program, Part A, adopted August 1993	
- Standard Provisions and Reporting Requirements, August 1993	
- August 6, 2001 Staff Letter: <i>Requirement for Priority Pollutant Monitoring in Receiving Water and Wastewater Discharges</i>	
- Regional Water Board Resolution 74-10	
Attachment H – Pretreatment Requirements	H-1

I. FACILITY INFORMATION

The following Discharger is subject to the waste discharge requirements set forth in this Order:

Table 4. Facility Information

Discharger	Delta Diablo Sanitation District
Name of Facility	Delta Diablo Sanitation District Wastewater Treatment Plant and its collection system
Facility Address	2500 Pittsburg-Antioch Highway
	Antioch, CA 94509
	Contra Costa County
Facility Contact, Title, and Phone	Gary Darling, General Manager, (925) 756-1920
Mailing Address	Same as Facility Address
Type of Facility	Publicly Owned Treatment Works
Facility Design Flow	16.5 MGD (average dry weather treatment capacity) 26.0 MGD (peak wet weather treatment capacity) 22.7 MGD (average dry weather capacity subject to conditions in Provision VI.C.9) 35.8 MGD (future peak wet weather capacity subject to conditions in Provision VI.C.9)
Service Areas	Cities of Antioch and Pittsburg and the unincorporated community of Bay Point
Service Population	189,000

II. FINDINGS

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter the Regional Water Board), finds:

A. Background. The Delta Diablo Sanitation District (hereinafter the “Discharger”) is currently discharging under Orders No. R2-2003-0114 and R2-2004-027 (Amendment) related to National Pollutant Discharge Elimination System (NPDES) Permit No. CA0038547. The Discharger submitted a Report of Waste Discharge, dated June 30, 2008, and applied to renew its NPDES permit to discharge up to 16.5 MGD of secondary treated wastewater (average dry weather flow) from the Delta Diablo Sanitation District Wastewater Treatment Plant.

For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. Facility Description. The Discharger owns and operates the Delta Diablo Sanitation District Wastewater Treatment Plant (hereinafter “Plant”), which provides secondary treatment of wastewater from domestic, commercial, and industrial sources from Pittsburg and Antioch and the unincorporated community of Bay Point. The current total service population is approximately

189,000 (2008 estimate). The average daily discharge rate was 9.5 MGD, based on flow data from 2004-2008. During that period, the highest maximum daily effluent flow rate was 19.7 MGD.

The Discharger provides wastewater collection services for the unincorporated community of Bay Point, and conveyance services for Bay Point, Antioch and Pittsburg. The cities of Antioch and Pittsburg own, operate and maintain satellite collection systems that feed into the Discharger's conveyance system. The Discharger owns and operates about 115 km of sewer lines, five flow equalization storage facilities, and six pump stations.

Wastewater treatment processes at the Plant include screening and grit removal, primary clarification, biological treatment with trickling towers and/or aeration basins, secondary clarification, disinfection (sodium hypochlorite), and dechlorination (sodium bisulfite). Peak wet weather flows are managed with a 2.2 million gallon (MG) flow equalization tank, a 1 MG equalization basin, and a 12.8 MG emergency retention pond, in addition to approximately 4 MG of storage in collection system pump stations. All influent flows receive primary treatment. During periods of exceptionally high flows, primary-treated flows in excess of the trickling tower capacity are diverted to the storage basins and returned to the trickling towers for secondary treatment once influent flow subsides.

About half of the secondary-treated wastewater undergoes tertiary treatment at the Discharger's Recycled Water Facility. Most of this water is used for cooling water makeup at the Delta and Los Medanos Energy Centers, with a small amount (less than 1%) used for irrigation at local parks. The power plants return approximately 2 MGD of cooling tower blowdown to the Plant, where it is combined with secondary-treated wastewater and is chlorinated and dechlorinated prior to discharge.

The Discharger has received requests for additional recycled water (new irrigation sites and power plants). In response, the Discharger plans to recycle more of its secondary-treated effluent and possibly obtain recycled water from outside its service area. The Discharger is also considering use of its outfall for disposal of a potential brine discharge from a reverse osmosis desalination plant. If all of these projects are implemented, the total discharge through Outfall 001 could be up to 23.4 MGD (average annual flow). The Discharger must complete improvements to the Plant to accommodate the increased flow. These improvements are scheduled to be complete in 2013.

Biosolids are concentrated using a gravity belt thickener, anaerobically digested, and dewatered by centrifuge. Biosolids are placed in the Vasco Road Landfill or the Potrero Hills Landfill as alternative daily cover, or are applied to land.

Attachment B provides a map of the area around the Plant. Attachment C provides a flow schematic of the Plant.

- C. Legal Authorities.** This Order is issued pursuant to Clean Water Act (CWA) section 402 and implements regulations adopted by the United States Environmental Protection Agency (USEPA) and Chapters 5.5, Division 7 of the California Water Code (CWC) (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from the Plant to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4, Division 7 of the CWC (commencing with section 13260).

- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and through other available sources. The Fact Sheet (Attachment F), which contains background information and rationale for requirements of the Order, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G through H are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Under CWC section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA.
- F. Technology-Based Effluent Limitations.** CWA Section 301(b) and NPDES regulations at 40 CFR 122.44 require that permits include conditions meeting applicable technology-based requirements at minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at 40 CFR 133. A detailed discussion of technology-based effluent limitation development is included in the Fact Sheet.
- G. Water Quality-Based Effluent Limitations.** CWA section 301(b) and NPDES regulations at 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.
- NPDES regulations at 40 CFR 122.44(d)(1)(i) mandate that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant that has no numeric criterion or objective, water quality-based effluent limitations (WQBELs) must be established using (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).
- H. Water Quality Control Plans.** *The Water Quality Control Plan for the San Francisco Bay Basin* (the Basin Plan) is the Regional Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Regional Water Board and approved by the State Water Resources Control Board (State Water Board), USEPA, and the Office of Administrative Law, as required.

The Basin Plan states that the beneficial uses of any specifically identified water body generally apply to its tributaries. The Basin Plan does not specifically identify beneficial uses for New York Slough, but does identify present and potential uses for the Sacramento-San Joaquin Delta, which includes New York Slough.

Beneficial uses applicable to New York Slough are summarized in Table 5.

Table 5. Beneficial Uses of New York Slough

Discharge Point	Receiving Water Name	Beneficial Uses
001	New York Slough	Agricultural Supply (AGR) Municipal and Domestic Supply (MUN) Groundwater Recharge (GWR) Industrial Service Supply (IND) Industrial Process Supply (PRO) Ocean, Commercial, and Sport Fishing (COMM) Estuarine Habitat (EST) Fish Migration (MIGR) Preservation of Rare and Endangered Species (RARE) Fish Spawning (SPWN) Wildlife Habitat (WILD) Water Contact Recreation (REC1) Non-Contact Water Recreation (REC2) Navigation (NAV)

Requirements of this Order implement the Basin Plan.

- I. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. About forty criteria in the NTR apply in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the State. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- J. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- K. Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on an existing discharger's request and demonstration that it is infeasible for it to achieve immediate compliance with an effluent limitation derived from a CTR criterion, a compliance schedule may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter.

The State Water Board adopted Resolution No. 2008-0025 on April 15, 2008, titled "Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits" which includes compliance schedule policies for pollutants that are not addressed by the SIP. This policy has been approved by USEPA and OAL, and became effective on August 27, 2008, superceding the Basin Plan's compliance schedule policy. Consistent with the State Water Board's new policy, this Order includes a compliance schedule and discharge specifications for dioxin-TEQ. A detailed discussion of the basis for the compliance schedule and discharge specifications is included in the Fact Sheet.

- L. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes. [65 Fed. Reg. 24641 (April 27, 2000) (codified at 40 CFR 131.21)]. Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
- M. Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and Water Quality Based Effluent Limitations (WQBELs) for individual pollutants. The technology-based effluent limitations consist of restrictions on biological oxygen demand (BOD), total suspended solids (TSS), pH, and oil and grease. Derivation of these technology-based limitations is discussed in the Fact Sheet (Attachment F). This Order's technology-based pollutant restrictions implement the minimum applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum federal technology-based requirements as necessary to meet water quality standards.
- WQBELs have been derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under State law and submitted to USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for the purposes of the CWA" pursuant to 40 CFR 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.
- N. Antidegradation Policy.** NPDES regulations at 40 CFR 131.12 require that the State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law and requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

- O. Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303(d)(4) and NPDES regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. As discussed in the Fact Sheet (**Attachment F**), anti-backsliding requirements are satisfied where effluent limitations in this Order are less stringent than those in the previous permit (Order No. R2-2003-0114.)
- P. Flow Increases.** The Discharger has proposed flow increases at the Plant to accommodate future growth and increased demands for recycled water. The Discharger plans to complete modifications to the Plant by 2013 to increase its capacity. Provision VI.C.9 of this Order requires the Discharger to complete the modifications and verify the increased treatment capacity. CEQA requirements for the flow increase were completed in 1988. The Discharger submitted a report titled "Anti-Degradation Analysis for Proposed Wastewater Treatment Plant Discharge Modification" in December 2008. As discussed in the Fact Sheet (**Attachment F**), the Regional Water Board finds that the increase in permitted capacity will produce minor effects that will not result in a significant reduction of water quality, and that the permitted discharge is consistent with the antidegradation provision of 40 CFR §131.12 and State Water Board Resolution 68-16.
- Q. Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the State. The Discharger is responsible for meeting all requirements of applicable State and federal law pertaining to threatened and endangered species.
- R. Monitoring and Reporting.** NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. CWC sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- S. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.
- T. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.B, IV.C, and V.B of this Order are included to implement State law only. These provisions/requirements are not required or authorized under the federal CWA, and consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

U. Notification of Interested Parties. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet (Attachment F.)

V. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

IT IS HEREBY ORDERED that this Order supersedes Orders No. R2-2003-0114 and R2-2004-0027 except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

- A.** Discharge of treated wastewater at a location or in a manner different from that described in this Order is prohibited.
- B.** Discharge at any point at which the treated wastewater does not receive an initial dilution of at least 61:1 is prohibited.
- C.** The bypass of untreated or partially treated wastewater to waters of the United States is prohibited, except as provided for in the conditions stated in Subsections I.G.2 and I.G.4 of Attachment D of this Order. Routing flows to either the trickling towers or the aeration basins, but not both, is not considered bypass and is not a violation of this Order because the Discharger has dual biological treatment processes.
- D.** The average dry weather flow, measured at Monitoring Locations EFF-001, as described in the attached Monitoring and Reporting Plan (MRP) (Attachment E), shall not exceed 16.5 MGD. This limit may be increased to 22.7 MGD upon compliance with the tasks described in Provision VI.C.9. The average dry weather flow shall be determined for compliance with this prohibition over three consecutive dry weather months each year.
- E.** Any sanitary sewer overflow that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Effluent Limitations for Conventional and Non-Conventional Pollutants

- a. The Discharger shall maintain compliance with the following effluent limitations for Discharge Point 001, with compliance measured at Monitoring Location EFF-001 for bacteria limits and at EFF-002 for all other effluent limits, as described in the attached MRP (Attachment E).

Table 6. Effluent Limitations for Conventional and Non-conventional Pollutants

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (BOD ₅)	mg/L	30	45	---	---	---
Total Suspended Solids (TSS)	mg/L	30	45	---	---	---
Oil and Grease	mg/L	10	---	20	---	---
pH ^[1]	s.u.	---	---	---	6.0	9.0
Chlorine, Total Residual	mg/L	---	---	---	---	0.0 ^[2]

Footnotes to Table 6:

- [1] If the Discharger monitors pH continuously, pursuant to 40 CFR 401.17, the Discharger shall be in compliance with the pH limitation specified herein, provided that both of the following conditions are satisfied: (i) the total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and (ii) no individual excursion from the range of pH values shall exceed 60 minutes.
- [2] This requirement is defined as below the limit of detection in standard test methods as defined in the latest edition of *Standard Methods for the Examination of Water and Wastewater*. The Discharger may elect to use a continuous in-line monitoring system(s) for measuring flows, sodium hypochlorite, and sodium bisulfite dosage (including a safety factor) and concentration to prove that chlorine residual exceedances are false positives. If convincing evidence is provided, Regional Water Board staff will conclude that these chlorine residual exceedances are false positives and are not violations of the Order's Total Residual Chlorine limit.

- b. **BOD₅ and TSS 85 Percent Removal:** The concentration-based average monthly percent removal of BOD₅ and TSS shall not be less than 85 percent.
- c. **Enterococcus Bacteria:** The treated wastewater at EFF-001 shall meet the following limits of bacteriological quality:

The 30-day geometric mean value for all samples analyzed for enterococcus bacteria shall not exceed 33 colonies per 100 mL.

2. Effluent Limitations for Toxic Pollutants

- a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-002, as described in the attached MRP (Attachment E).

Table 7. Effluent Limitations for Toxic Pollutants

Parameter		Final Effluent Limitations ^[1,2]	
		Average Monthly	Maximum Daily
Copper	µg/L	38	53
Selenium	µg/L	4.1	8.2
Cyanide	µg/L	18	45
Dioxin-TEQ ^[3]	µg/L	1.4 x 10 ⁻⁸	3.9 x 10 ⁻⁸
Bromoform	µg/L	39	77
Chlorodibromomethane	µg/L	3.6	7.1
Methylene Chloride	µg/L	43	85
Bis(2-ethylhexyl)phthalate	µg/L	12	24
Ammonia, Total	mg/L as N	210	260

Footnotes to Table 7:

Units:

µg/L = micrograms per liter

mg/L = milligrams per liter

pg/L = picograms per liter

- [1] a. Limitations for toxic pollutants apply to the average concentration of all samples collected during the averaging period (daily = 24-hour period; monthly = calendar month).
- b. All metals limitations are expressed as total recoverable metal.
- [2] A daily maximum or average monthly value for a given constituent shall be considered noncompliant with the effluent limitations only if it exceeds the effluent limitation and the Reporting Level for that constituent. As outlined in Section 2.4.5 of the SIP, Table 8, below, indicates the Minimum Level (ML) for compliance determination purposes. An ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.
- [3] Final effluent limitations shall become effective on August 1, 2014. The Regional Water Board may amend these final effluent limitations prior to this date in accordance with TMDLs that become effective subsequent to the effective date of this Order.

Table 8. Minimum Levels for Pollutants with Effluent Limitations

Parameter	Minimum Level	Units
Copper	0.5	µg/L
Selenium	1	µg/L
Cyanide	5	µg/L
Bromoform	0.5	µg/L
Chlorodibromomethane	0.5	µg/L
Methylene Chloride	0.5	µg/L
Bis(2-ethylhexyl)phthalate	5	µg/L
Ammonia	0.2	mg/L
Dioxin-TEQ	As specified below	
2,3,7,8-TCDD	5	pg/L
1,2,3,7,8-PeCDD	25	pg/L
1,2,3,4,7,8-HxCDD	25	pg/L
1,2,3,6,7,8-HxCDD	25	pg/L
1,2,3,7,8,9-HxCDD	25	pg/L
1,2,3,4,6,7,8-HpCDD	25	pg/L
OCDD	50	pg/L
2,3,7,8-TCDF	5	pg/L

Parameter	Minimum Level	Units
1,2,3,7,8-PeCDF	25	pg/L
2,3,4,7,8-PeCDF	25	pg/L
1,2,3,4,7,8-HxCDF	25	pg/L
1,2,3,6,7,8-HxCDF	25	pg/L
1,2,3,7,8,9-HxCDF	25	pg/L
2,3,4,6,7,8-HxCDF	25	pg/L
1,2,3,4,6,7,8-HpCDF	25	pg/L
1,2,3,4,7,8,9-HpCDF	25	pg/L
OCDF	50	pg/L
Total Ammonia	0.2	mg/L as N

3. Interim Effluent Limitations – Discharge Point 001

- a. The Discharger shall maintain compliance with the following interim effluent limitation at Discharge Point 001, with compliance measured at Monitoring Location EFF-002, as described in the attached MRP (Attachment E). Final effluent limitations shall become effective on August 1, 2014.

Table 9. Interim Effluent Limitation for Dioxin-TEQ

Parameter	Units	Interim Effluent Limitations	
		AMEL	MDEL
Dioxin-TEQ	µg/L	---	1.3×10^{-7}

4. Acute Toxicity:

- a. Representative samples of the effluent at Monitoring Location EFF-002 shall meet the following limits for acute toxicity. Bioassays shall be conducted in compliance with Section V.A of the MRP (Attachment E).

The survival of organisms in undiluted combined effluent shall be:

- an eleven (11) sample median value of not less than 90 percent survival, and
- an eleven (11) sample 90 percentile value of not less than 70 percent survival.

- b. These acute toxicity limitations are further defined as follows:

11 sample median: A bioassay test showing survival of less than 90 percent represents a violation of this effluent limit, if five or more of the past ten or less bioassay tests show less than 90 percent survival.

90th percentile: A bioassay test showing survival of less than 70 percent represents a violation of this effluent limit, if one or more of the past ten or less bioassay tests show less than 70 percent survival.

- c. Bioassays shall be performed using the most up-to-date USEPA protocol and the most sensitive species based on the most recent screening test results. Bioassays shall be

conducted in compliance with *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms*, currently 5th Edition (EPA-821-R-02-012).

- d. If the Discharger can demonstrate to the satisfaction of the Executive Officer that toxicity exceeding the levels cited above is caused by ammonia and that the ammonia in the discharge is in compliance with effluent limits, then such toxicity does not constitute a violation of this effluent limitation.

5. Chronic Toxicity

- a. Compliance with the Basin Plan narrative chronic toxicity objective shall be demonstrated according to the following tiered requirements based on results from representative samples of the treated final effluent at Monitoring Location EFF-002, which meet test acceptability criteria, and follow requirements of Section V.B of the MRP (Attachment E). Failure to conduct the required toxicity tests or a TRE within a designated period shall result in the establishment of effluent limitations for chronic toxicity.
 - (1) Conduct routine monitoring.
 - (2) Accelerate monitoring after exceeding a three sample median of 10 chronic toxicity units (TUc) or single-sample maximum of 20 TUc, consistent with Table 4-5 of the Basin Plan for deep-water dischargers. Accelerated monitoring shall consist of monthly monitoring.
 - (3) Return to routine monitoring if accelerated monitoring does not exceed the "trigger" in (2), above.
 - (4) If accelerated monitoring confirms consistent toxicity above the "trigger" in (2), above, initiate toxicity identification evaluation/toxicity reduction evaluation (TIE/TRE) in accordance with a workplan submitted in accordance with Section V.B.3 of the MRP (Attachment E) that incorporates any and all comments from the Executive Officer.
 - (5) Return to routine monitoring after appropriate elements of the TRE workplan are implemented and either the toxicity drops below the "trigger" level in (2), above, or, based on the results of the TRE, the Executive Officer authorizes a return to routine monitoring.

- b. Test Species and Methods

The Discharger shall conduct routine monitoring with the test species and protocols specified in Section V.B of the MRP (Attachment E). The Discharger shall also perform Chronic Toxicity Screening Phase monitoring as described in the Appendix E-1 of the MRP (Attachment E). Chronic Toxicity Monitoring Screening Phase Requirements, Critical Life Stage Toxicity Tests and definitions of terms used in the chronic toxicity monitoring are identified in Appendices E-1 and E-2 of the MRP (Attachment E).

B. Land Discharge Specifications

Not Applicable.

C. Reclamation Specifications

Not Applicable.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

1. Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharges shall not cause the following in New York Slough:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foams;
 - b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended, or deposited oil and other products of petroleum origin; or
 - e. Toxic or other deleterious substances to be present in concentrations or quantities that will cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or that render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State within one foot of the water surface:
 - a. Dissolved Oxygen 7.0 mg/L, minimum

The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors cause concentrations less than that specified above, the discharge shall not cause further reduction in ambient dissolved oxygen concentrations.
 - b. Dissolved Sulfide Natural background levels
 - c. pH Within the range from 6.5 to 8.5
3. The discharge shall not cause a violation of any particular water quality standard for receiving waters adopted by the Regional or State Water Boards as required by the CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the CWA, or amendments thereto, the

Regional Water Board will revise and modify this Order in accordance with such more stringent standards.

B. Groundwater Limitations

Not Applicable.

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with Federal Standard Provisions included in Attachment D of this Order.
2. The Discharger shall comply with all applicable items of the Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993 (Standard Provisions, Attachment G), except for Section A.13. Where provisions or reporting requirements specified in this Order and Attachment G are different from equivalent or related provisions or reporting requirements given in the Standard Provisions in Attachment D, the specifications of this Order and/or Attachment G shall apply in areas where those provisions are more stringent. Duplicative requirements in the federal Standard Provisions in VI.A.1, above (Attachment D), and the regional Standard Provisions (Attachment G) are not separate requirements. A violation of a duplicative requirement does not constitute two separate violations.

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP (Attachment E) and future revisions thereto. The Discharger shall also comply with the requirements contained in *Self Monitoring Programs, Part A*, August 1993 (Attachment G).

C. Special Provisions

1. Reopener Provisions

The Regional Water Board may modify or reopen this Order prior to its expiration date in any of the following circumstances as allowed by law:

- a. If present or future investigations demonstrate that the discharges governed by this Order will have, or will cease to have, a reasonable potential to cause or contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters.
- b. If new or revised WQOs or Total Maximum Daily Loads (TMDLs) come into effect for the San Francisco Bay estuary and contiguous water bodies (whether statewide, regional, or site-specific). In such cases, effluent limitations in this Order will be modified as necessary to reflect updated WQOs and waste load allocations in TMDLs. Adoption of effluent limitations contained in this Order is not intended to restrict in any way future modifications based on legally adopted WQOs, TMDLs, or as otherwise permitted under Federal regulations governing NPDES permit modifications.

- c. If translator or other water quality studies provide a basis for determining that a permit condition(s) should be modified.
- d. If an administrative or judicial decision on a separate NPDES permit or WDR addresses requirements similar to this discharge.
- e. Or as otherwise authorized by law.

The Discharger may request permit modification based on the above. The Discharger shall include in any such request an antidegradation and antibacksliding analysis.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Effluent Characterization for Selected Constituents

The Discharger shall continue to monitor and evaluate the discharge from Discharge Point 001 (measured at EFF-002) for the constituents listed in Enclosure A of the Regional Water Board's August 6, 2001, Letter entitled, *Requirement for Monitoring of Pollutants in Effluent and Receiving Water to Implement New Statewide Regulations and Policy* (Attachment G), according to the sampling frequency specified in the attached MRP (Attachment E). Compliance with this requirement shall be achieved in accordance with the specifications stated in the Regional Water Board's August 6, 2001, Letter under Effluent Monitoring for Major Dischargers.

The Discharger shall evaluate on an annual basis if concentrations of any constituent increase over past performance. The Discharger shall investigate the cause of the increase. The investigation may include, but need not be limited to, an increase in the effluent monitoring frequency, monitoring of internal process streams, and monitoring of influent sources. This requirement may be satisfied through identification of these constituents as "pollutants of concern" in the Discharger's Pollutant Minimization Program described in Provision VI.C.3, below. A summary of the annual evaluation of data and source investigation activities shall also be reported in the annual self-monitoring report.

A final report that presents all the data shall be submitted to the Regional Water Board no later than 180 days prior to the Order expiration date. This final report shall be submitted with the application for permit reissuance.

b. Ambient Background Receiving Water Study

The Discharger shall collect or participate in collecting background ambient receiving water monitoring data for priority pollutants for which the Regional Water Board is required to perform reasonable potential analyses and calculate effluent limitations. The data on the conventional water quality parameters (pH, salinity, and hardness) shall be sufficient to characterize these parameters in the receiving water at a point after the discharge has mixed with the receiving waters. This provision may be met through monitoring through a collaborative Bay Area Clean Water Agencies (BACWA) study or a similar ambient monitoring program for San Francisco Bay. This Order may be

reopened, as appropriate, to incorporate effluent limits or other requirements based on Regional Water Board review of these data.

The Discharger shall submit, or cause to have submitted on its behalf, a final report that presents all this data to the Regional Water Board 180 days prior to Order expiration, or cause one to be submitted on its behalf. This final report shall be submitted prior to or with the application for permit reissuance.

3. Best Management Practices and Pollution Minimization

a. Pollutant Minimization Program

The Discharger shall continue to improve, in a manner acceptable to the Executive Officer, its existing Pollutant Minimization Program to promote minimization of pollutant loadings to the Plant and therefore to the receiving waters.

b. Annual Pollution Prevention Report

The Discharger shall submit an annual report, acceptable to the Executive Officer, no later than February 28th of each calendar year. The annual report shall cover January through December of the preceding year. Each annual report shall include at least the following information:

- (1) *A brief description of its treatment plant, treatment plant processes and service area.*
- (2) *A discussion of the current pollutants of concern.* Periodically, the Discharger shall determine which pollutants are currently a problem and/or which pollutants may be potential future problems. This discussion shall include the reasons why the pollutants were chosen.
- (3) *Identification of sources for the pollutants of concern.* This discussion shall include how the Discharger intends to estimate and identify pollutant sources. The Discharger should also identify sources or potential sources not directly within the ability or authority of the Discharger to control, such as pollutants in the potable water supply and air deposition.
- (4) *Identification of tasks to reduce the sources of the pollutants of concern.* This discussion shall identify and prioritize tasks to address the Discharger's pollutants of concern. The Discharger may implement the tasks themselves or participate in group, regional, or national tasks that will address its pollutants of concern whenever it is efficient and appropriate to do so. A time line shall be included for the implementation of each task.
- (5) *Outreach to employees.* The Discharger shall inform its employees about the pollutants of concern, potential sources, and how they might be able to help reduce the discharge of these pollutants. The Discharger may provide a forum for employees to provide input to the program.

- (6) *Continuation of Public Outreach Program.* The Discharger shall prepare a public outreach program to communicate pollution minimization measures to its service area. Outreach may include participation in existing community events such as county fairs, initiating new community events such as displays and contests during Pollution Prevention Week, conducting school outreach programs, conducting Plant tours, and providing public information in various media. Information shall be specific to target audiences. The Discharger shall coordinate with other agencies as appropriate.
- (7) *Discussion of criteria used to measure PMP's and tasks' effectiveness.* The Discharger shall establish criteria to evaluate the effectiveness of its PMP. This discussion shall address the specific criteria used to measure the effectiveness of each of the tasks in Provision VI.C.3.b.(3-6), above.
- (8) *Documentation of efforts and progress.* This discussion shall detail all of the Discharger's activities in the Pollutant Minimization Program during the reporting year.
- (9) *Evaluation of Program's and tasks' effectiveness.* The Discharger shall use the criteria established in b.(7), above, to evaluate the Pollutant Minimization Program's and tasks' effectiveness.
- (10) *Identification of specific tasks and time schedules for future efforts.* Based on the evaluation of effectiveness, the Discharger shall describe how it will continue or change its PMP tasks to more effectively reduce the loadings of pollutant to the treatment plant, and subsequently to receiving waters.

c. Pollutant Minimization Program for Reportable Priority Pollutants

The Discharger shall develop and conduct a PMP as further described below when there is evidence (e.g., sample results reported as Detected but Not Quantified [DNQ] when the effluent limitation is less than the method detection limit [MDL]), sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

- (1) A sample result is reported as DNQ and the effluent limitation is less than the Reporting Limit (RL); or
- (2) A sample result is reported as Not Detected (ND) and the effluent limitation is less than the MDL, using definitions described in the SIP.

d. If triggered by the reasons in c. above, the Discharger's PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

- (1) An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling, or alternative measures approved by the Executive Officer when it is demonstrated that source monitoring is unlikely to produce useful analytical data;

- (2) Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system, or alternative measures approved by the Executive Officer when it is demonstrated that influent monitoring is unlikely to produce useful analytical data;
- (3) Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;
- (4) Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and
- (5) The annual report required by 3.b. above, shall specifically address the following items:
 - i. All PMP monitoring results for the previous year;
 - ii. A list of potential sources of the reportable priority pollutant(s);
 - iii. A summary of all actions undertaken pursuant to the control strategy; and
 - iv. A description of actions to be taken in the following year.

4. Construction, Operation, and Maintenance Specifications

a. Wastewater Facilities Review and Evaluation and Status Reports

- (1) The Discharger shall operate and maintain its wastewater collection, treatment, and disposal facilities in a manner to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary, in order to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the Discharger's service responsibilities.
- (2) The Discharger shall regularly review and evaluate its wastewater facilities and operation practices in accordance with (1) above. Reviews and evaluations shall be conducted as an ongoing component of the Discharger's administration of its wastewater facilities.
- (3) The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its wastewater facilities and operation practices, including any recommended or planned actions and an estimated time schedule for these actions. The Discharger shall also include, in each annual Self-Monitoring Report, a description or summary of review and evaluation procedures, and applicable wastewater facility programs or capital improvement projects.

b. Operations and Maintenance (O&M) Manual, Review and Status Reports

- (1) The Discharger shall maintain an O&M manual for its wastewater facilities. The O&M Manual shall be maintained in usable condition and be available for reference and use by all applicable personnel.
- (2) The Discharger shall regularly review, revise, or update, as necessary, the O&M Manual(s) to ensure that the document(s) may remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and revisions or updates shall be completed as necessary. Applicable revisions of the O&M manual shall be completed within 90 days of any significant changes being made in Plant equipment or operation practices.
- (3) The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its O&M manual, including any recommended or planned actions and an estimated time schedule for these actions, upon request. The Discharger shall also include a description or summary of review and evaluation procedures and applicable changes to its O&M manual in each Annual Self-Monitoring Report.

c. Contingency Plan, Review and Status Reports

- (1) The Discharger shall maintain a Contingency Plan as required by Regional Water Board Resolution 74-10 (Attachment G) and as prudent in accordance with current municipal facility emergency planning. The discharge of pollutants in violation of this Order where the Discharger has failed to develop and/or adequately implement a Contingency Plan will be the basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the CWC.
- (2) The Discharger shall regularly review the Contingency Plan so that the plan may remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and updates shall be completed as necessary.
- (3) The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its review and update of the Contingency Plan upon request. The Discharger shall also include a description or summary of review and evaluation procedures and applicable changes to its Contingency Plan in each Annual Self-Monitoring Report.

5. Special Provisions for POTWs

a. Pretreatment Program

- (1) The Discharger shall implement and enforce its approved pretreatment program in accordance with federal Pretreatment Regulations (40 CFR 403), pretreatment standards promulgated under Sections 307(b), 307(c), and 307(d) of the CWA, pretreatment requirements specified under 40 CFR 122.44(j), and the requirements in Attachment H, "Pretreatment Requirements." The Discharger's responsibilities include, but are not limited to:

- i. Enforcement of National Pretreatment Standards of 40 CFR 403.5 and 403.6;
 - ii. Implementation of its pretreatment program in accordance with legal authorities, policies, procedures, and financial provisions described in the General Pretreatment regulations (40 CFR 403) and its approved pretreatment program;
 - iii. Submission of reports to USEPA, the State Water Board, and the Regional Water Board, as described in Attachment H "Pretreatment Requirements."
 - iv. Evaluate the need to revise local limits under 40 CFR 403.5(c)(1); and within 180 days after the effective date of this Order, submit a report describing the changes with a plan and schedule for implementation. To ensure no significant increase in the discharge of copper, and thus compliance with antidegradation requirements, the Discharger shall not consider eliminating or relaxing local limits for copper in this evaluation.
- (2) The Discharger shall implement its approved pretreatment program and the program shall be an enforceable condition of this Order. If the Discharger fails to perform the pretreatment functions, the Regional Water Board, the State Water Board, or the USEPA may take enforcement actions against the Discharger as authorized by the Clean Water Act.

b. Biosolids Management Practices Requirements

- (1) All biosolids generated by the Discharger must be disposed of in a municipal solid waste landfill, used as part of a waste-to-energy facility, reused by land application, composted, or disposed of in a sludge-only landfill in accordance with 40 CFR 503. If the Discharger desires to dispose of biosolids by a different method, a request for permit modification must be submitted to USEPA 180 days before start-up of the alternative disposal practice. All the requirements in 40 CFR 503 are enforceable by USEPA whether or not they are stated in an NPDES permit or other permit issued to the Discharger. The Regional Water Board should be copied on relevant correspondence and reports forwarded to USEPA regarding sludge management practices.
- (2) Biosolids treatment, storage and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, or result in groundwater contamination.
- (3) The Discharger shall take all reasonable steps to prevent or minimize any biosolids use or disposal which has a likelihood of adversely affecting human health or the environment.
- (4) The discharge of biosolids shall not cause waste material to be in a position where it is or can be carried from the biosolids treatment and storage site and deposited in waters of the State.
- (5) The biosolids treatment and storage site shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the temporary

storage site. Adequate protection is defined as protection from at least a 100-year storm and protection from the highest possible tidal stage that may occur.

- (6) For biosolids that are applied to the land, placed on a surface disposal site, or fired in a biosolids incinerator as defined in 40 CFR 503, the Discharger shall submit an annual report to USEPA and the Regional Water Board containing monitoring results and pathogen and vector attraction reduction requirements as specified by 40 CFR 503, postmarked February 15 of each year, for the period covering the previous calendar year.
- (7) Biosolids that are disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR 258. In the annual Self-Monitoring Report, the Discharger shall include the amount of biosolids disposed of and the landfill(s) to which it was sent.
- (8) Permanent on-site biosolids storage or disposal activities are not authorized by this Order. A report of Waste Discharge shall be filed and the site brought into compliance with all applicable regulations prior to commencement of any such activity by the Discharger.
- (9) Biosolids Monitoring and Reporting Provisions of this Regional Water Board's Standard Provisions (Attachment G), apply to sludge handling, disposal and reporting practices.
- (10) The Regional Water Board may amend this Order prior to expiration if changes occur in applicable state and federal sludge regulations.

c. Sanitary Sewer Overflows and Sewer System Management Plan

The Discharger's collection system is part of the facility that is subject to this Order. As such, the Discharger must properly operate and maintain its collection system (Attachment D, Standard Provisions - Permit Compliance, subsection I.D). The Discharger must report any noncompliance (Attachment D, Standard Provision - Reporting, subsections V.E.1 and V.E.2), and mitigate any discharge from the Discharger's collection system in violation of this Order (Attachment D, Standard Provisions - Permit Compliance, subsection I.C). The General Waste Discharge Requirements for Sanitary Sewer Systems (General WDRs for Wastewater Collection Agencies, State Water Board Order No. 2006-0003 DWQ) includes requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. While the Discharger must comply with both the General WDRs for Wastewater Collection Agencies and this Order, the General WDRs for Wastewater Collection Agencies more clearly and specifically stipulate requirements for operation and maintenance and for reporting and mitigating sanitary sewer overflows.

Implementation of the requirements of the General WDRs for Wastewater Collection Agencies for proper operation and maintenance and mitigation of spills will satisfy the corresponding federal NPDES requirements specified in this Order. Following reporting requirements in the General WDRs for Wastewater Collection Agencies will satisfy NPDES reporting requirements for sewage spills. Furthermore, the Discharger shall

comply with the schedule for development of sewer system management plans as indicated in the letter issued by the Regional Water Board on July 7, 2005, pursuant to CWC Section 13267; and with the sanitary sewer overflow and unauthorized discharge notification and reporting requirements of the letter issued by the Regional Water Board on May 1, 2008, pursuant to CWC Section 13267; and with the sanitary sewer overflow and unauthorized discharge notification and reporting requirements of the letter issued by the Regional Water Board on May 1, 2008, pursuant to CWC section 13267. The Discharger shall report sanitary sewer overflows electronically using the State Water Board's on-line reporting system.

6. Compliance Schedule

- a. **Dioxin-TEQ.** The Discharger shall adhere to the following schedule to comply with final effluent limitations established by this Order for dioxin-TEQ.

Table 10. Dioxin-TEQ Compliance Schedule

Task	Deadline
1. Implement existing source control measures to reduce concentrations of dioxin-TEQ to the Plant, and therefore to receiving waters.	Upon the effective date of this Order.
2. Evaluate and report on the effectiveness of source control measures in reducing concentrations of dioxin-TEQ to the Plant. If previous measures have not been successful in enabling the Discharger to comply with final limits for dioxin-TEQ, the Discharger shall also identify and implement additional source control measures to further reduce concentrations of these pollutants.	Annually by February 28 with the Annual Pollution Prevention Report required by Section VI.C.3.b, above.
3. In the event that source control measures are insufficient for meeting the final water quality based effluent limit specified in Effluent Limitations and Discharge Specifications A.2 for dioxin-TEQ, submit a schedule for implementation of additional actions to reduce the concentrations of these pollutants.	No later than 12 months after a detection of dioxin-TEQ that is out of compliance with the final effluent limits.
4. Commence implementation of the identified additional actions in accordance with the schedule submitted in task 3, above.	Annually by February 28 with the Annual Pollution Prevention Report required by Section VI.C.3.b, above.
5. Comply with final effluent limitations for dioxin-TEQ. (see Effluent Limitation IV.A.3)	August 1, 2014

7. Copper Action Plan

The Discharger shall implement pretreatment, source control, and pollution prevention for copper in accordance with the following tasks and time schedule.

Table 11. Copper Action Plan

Task	Deadline
1. Review Potential Copper Sources The Discharger shall submit an inventory of potential copper sources to the treatment plant.	July 1, 2009
2. Implement Copper Control Program The Discharger shall submit a plan for and begin implementation of a program to reduce copper discharges identified in Task 1. For publicly owned treatment works, the plan shall consist, at a minimum, of the following elements: <ol style="list-style-type: none"> Provide education and outreach to the public (e.g., focus on proper pool and spa maintenance and plumbers' roles in reducing corrosion). If corrosion is determined to be a significant copper source, work cooperatively with local water purveyors to reduce and control water corrosivity, as appropriate, and ensure that local plumbing contractors implement best management practices to reduce corrosion in pipes. Educate plumbers, designers, and maintenance contractors for pools and spas to encourage best management practices that minimize copper discharges. 	With the annual pollution prevention report due each year on February 28 after the completion of Task 1
3. Implement Additional Measures If the three-year rolling mean dissolved copper concentration of the receiving water exceeds 2.8 ug/L, evaluate the effluent copper concentration trend, and if it is increasing, develop and implement additional measures to control copper discharges.	Within 90 days of an exceedance submit a technical report that describes effluent copper concentration trends and, if increasing, identifies additional measures that the Discharger will take to control copper along with an implementation schedule
4. Studies to Reduce Copper Pollutant Impact Uncertainties The Discharger shall conduct or cause to be conducted technical studies to investigate possible copper sediment toxicity and technical studies to investigate sublethal effects on salmonids. Specifically, the Discharger shall include the manner in which the above will be accomplished and describe the studies to be performed with an implementation schedule. To satisfy this requirement, Dischargers may collaborate and conduct these studies as a group.	Submit study plan and schedule with annual pollution prevention report due on February 28, 2010
5. Report on Status of Copper Control Program The Discharger shall submit a report to the Regional Water Board documenting implementation of the copper control program. Additionally, the Discharger shall report the findings and results of the studies completed, planned, or in progress under Task 4. On Task 4 studies, Dischargers may collaborate and provide this information in a single report to satisfy this requirement for the entire group.	With annual pollution prevention report due each year starting with the February 28, 2010 report